

Work Order ID 161895

Tuesday, May 23, 2017 11:00:43 AM

161895

Page 1

Item ID: D3916-041 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Rib Assembly
Start Date: 5/31/2017 Start Qty: 4.00 ***4*** Cust Item ID:
Required Date: 6/5/2017 Req'd Qty: 4.00 ***4*** Customer:
Reference:

Approvals: Process Plan: DA - 21 Date: 5/20/2017 Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3916	A								
100		0.00							
100									
Large Fab	Memo	2.00							
Large Fab	1- Cut tube 50" 2- Bend tube with manuel pipe bender as per DT9567 *** Make line at 9.00" and use jig for other lines, and ensure seam in place on side of tube when bending*** 3- Trim access tube material to finish size as per dwg D3916 4- Drill and chamfer holes as per dwg D3916-1 using DT9605								
105	QC6- All purchased or subcontracted products	0.00							
105									
QC	Memo	0.00							
Quality Control									

4x D.M.L. 2017-06-27
SC

DAS
38
9-89

JUL 03 2017

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
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Description Work Order Deviation				Disposition				Completed By																	
								Lead hand / Supervisor Approval Verification																	
										QC / QA Coordinator Approval															
Root Cause		FAULT CATEGORY																							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			OTHER : ☐																	

Tuesday, May 23, 2017 11:00:43 AM

Page 2

Reference:

Stop *NR2*

**Insp.
Stamp**

0.00

1.24

Memo

1- weld bushing as per dwg D3916
2- grind welds flush

QC5- Inspect part completeness to step on W/O

0.00

0.08

Memo

Quality Control

QC10- Inspect visual per QSI004- ground welds

0.00

0.00

Memo

Quality Control

DAS
38
9-89

AUG 14 2017

DAS
38
9-89
AUG 14 2017

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
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								OTHER : ☐	

Work Order ID 161895

Tuesday, May 23, 2017 11:00:43 AM

161895

Page 3

Item ID: D3916-041

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop ***NS2***

Item Name: Rib Assembly

Start Date: 5/31/2017 Start Qty: 4.00

4

Cust Item ID:

Required Date: 6/5/2017 Req'd Qty: 4.00

4

Customer:

Reference:

Approvals:

Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start

NR1

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

NR2Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

130

Identify as per dwg & Stock Location: WA004

0.00

130

Packaging

Memo

0.04

Packaging

LOCATION: WA004

4x D.M.L 2017-3-14

140

QC21- Final Inspection - Work Order Release

0.00

140

QC

Memo

0.40

Quality Control

DAS
21
9-89

AUG 16 2017

AUG 15 2017

DAS
21
9-89

AUG 16 2017

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



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Picklist Print

Tuesday, May 23, 2017 11:00:42 AM

Page 1

Work Order ID: 161895

161895

Parent Item: D3916-041

D3916-041

Parent Item Name: Rib Assembly

Start Date: 5/31/2017

Required Date: 6/5/2017

Start Qty: 4.00

Required Qty: 4.00

Comments: IPP RevA: New issue DD verified by:EC
per dwg revA 10.03.15 verified by:EC

IPP Rev:B as

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

D3759-1

Manufactured

No

100

Each

303.0000

7

28

D3759-1

Bushing

**

D.M.L 2017-8-17

B163317 → 12
B163886 → 16

Location

Loc Qty

Loc Code

WA004

303

145615

33

149531

28

158784

28

160519

214

M304TS0.750W.049

Purchased

No

100

f

494.2810

4.166

17.54105

M304TS0 750W 049

304 SQ Tube .75x.75x.049W

**

D.M.L 2017-06-27

Location

Loc Qty

Loc Code

WA004

494.281

M136907

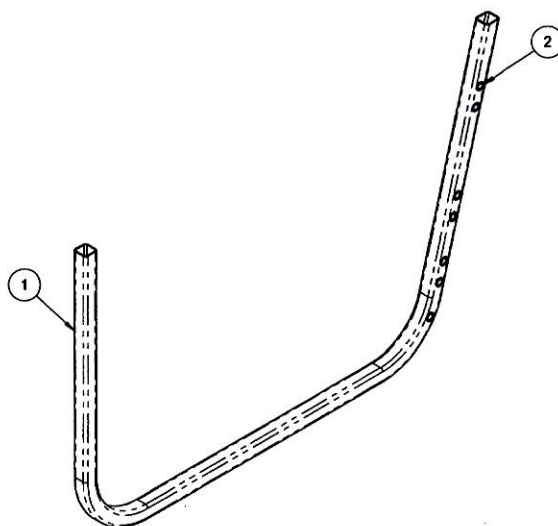
0.281

M137401

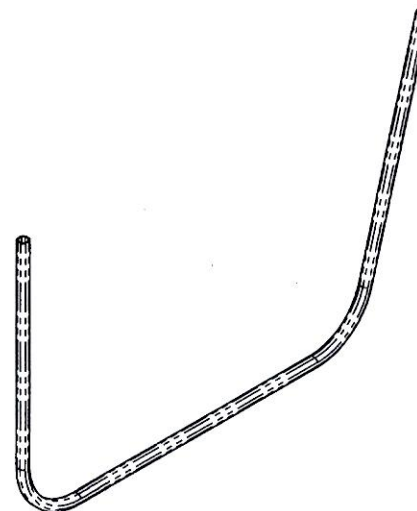
494

24

ITEM	QTY -041	P/N	DESCRIPTION
	X	D3916-041	RIB ASSY
1	1	D3916-1	RIB
2	7	D3759-1	BUSHING



D3916-041 RIB ASSY



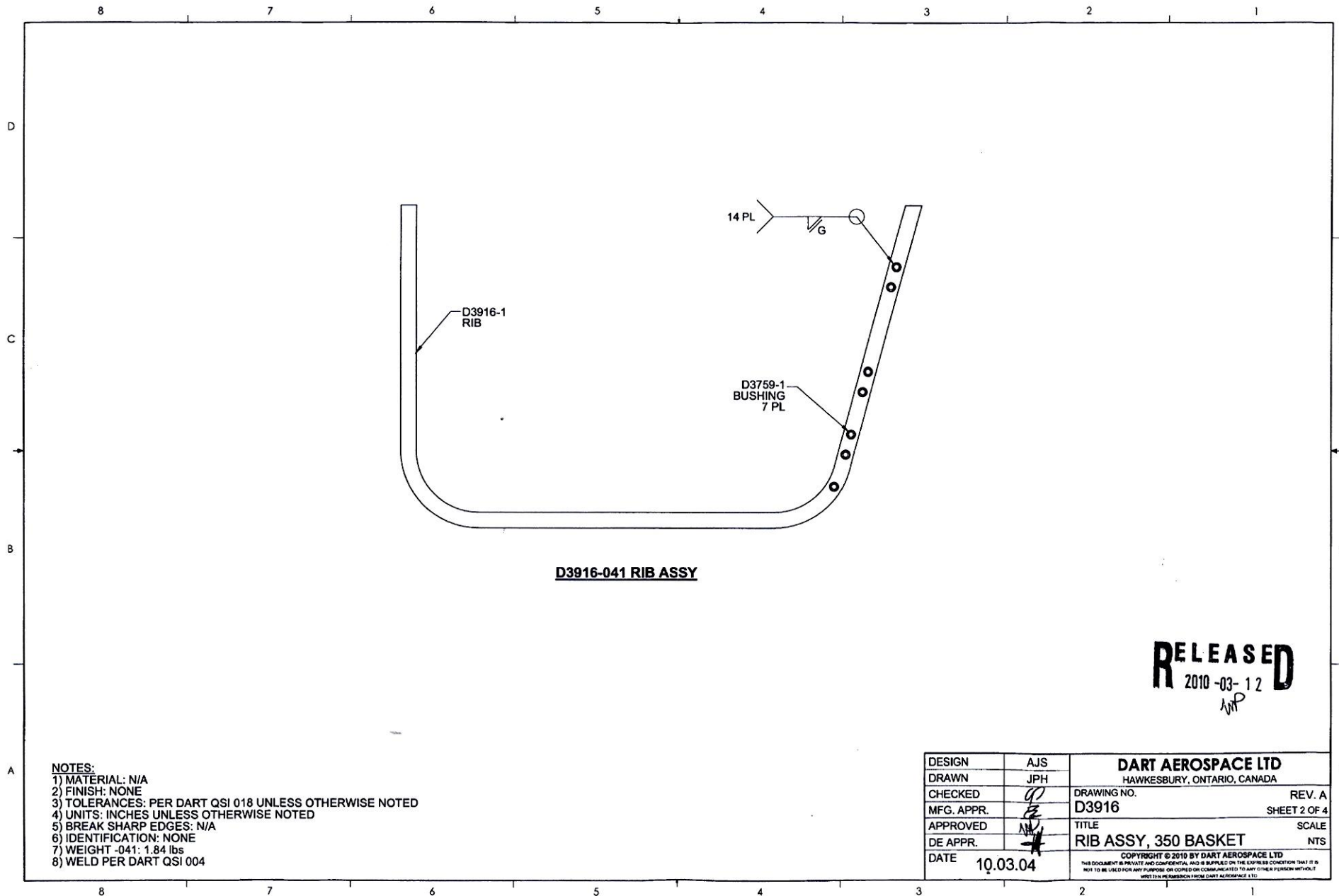
D3916-5 LIGHT RIB

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 161895

20170522

OK 10.12.21
UNDER REVIEW
10.10.11
ADDITION OF HOLE + BUSHING
ON D3916-041 RIBS.
RELEASED
2010-03-12
MP

A	NEW ISSUE	DESCRIPTION	JPH	10.03.04
REV.			BY	DATE
DESIGN	AJS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA		
DRAWN	JPH			
CHECKED		DRAWING NO.		REV. A
MFG. APPR.		D3916		SHEET 1 OF 4
APPROVED		TITLE		SCALE
DE APPR.		RIB ASSY, 350 BASKET		NTS
DATE	10.03.04	COPYRIGHT © 2010 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.		

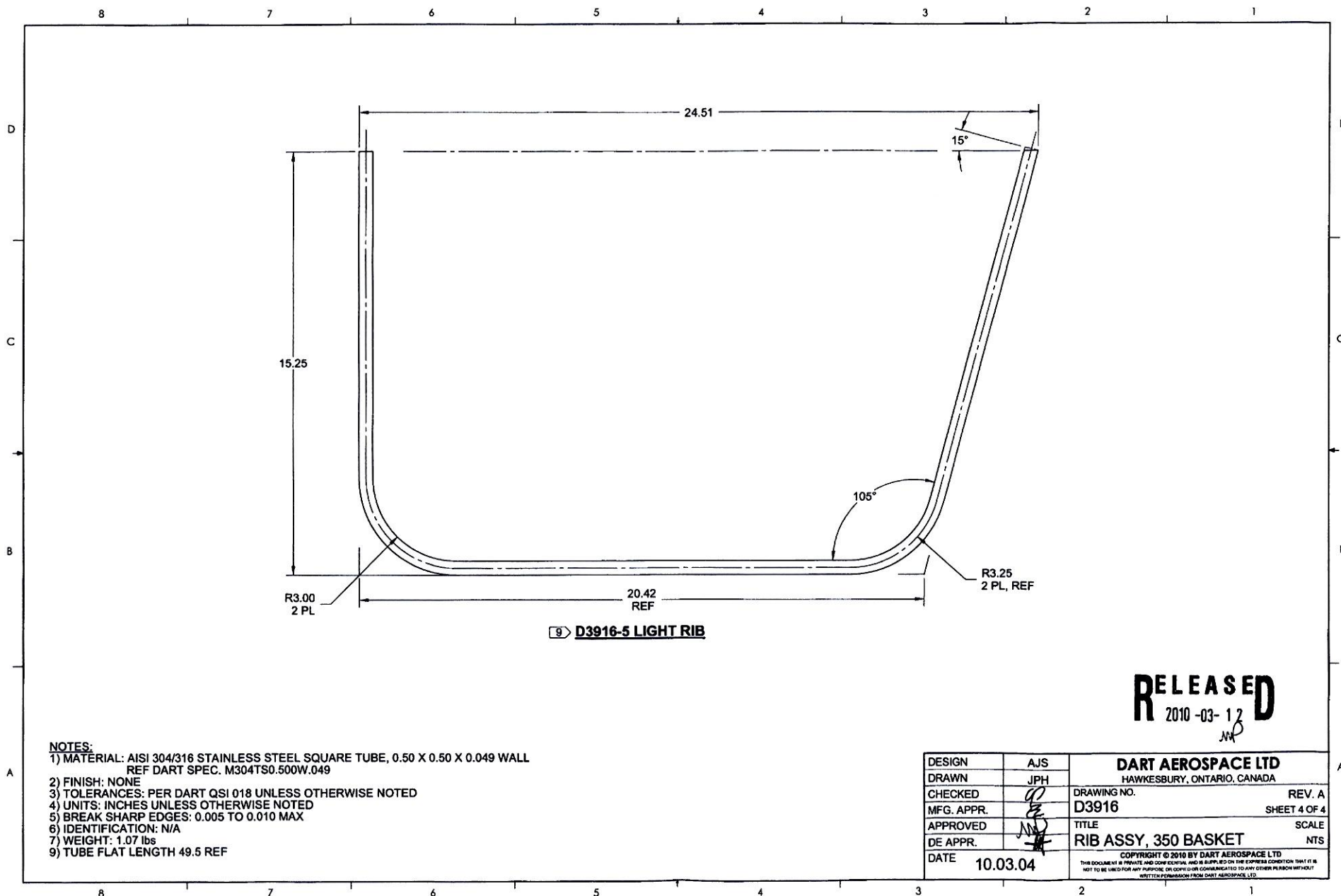


NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: NONE
- 7) WEIGHT -041: 1.84 lbs
- 8) WELD PER DART QSI 004

DESIGN	AJS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	JPH		
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. A
MFG. APPR.	<i>[Signature]</i>	D3916	SHEET 2 OF 4
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	RIB ASSY, 350 BASKET	NTS
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RELEASED
2010-03-12
[Signature]



RELEASED
2010-03-12

- NOTES:**
- 1) MATERIAL: AISI 304/316 STAINLESS STEEL SQUARE TUBE, 0.50 X 0.50 X 0.049 WALL
REF DART SPEC. M304TS0.500W.049
 - 2) FINISH: NONE
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: N/A
 - 7) WEIGHT: 1.07 lbs
 - 9) TUBE FLAT LENGTH 49.5 REF

DESIGN	AJS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	JPH		
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. A
MFG. APPR.	<i>[Signature]</i>	D3916	SHEET 4 OF 4
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	RIB ASSY, 350 BASKET	NTS
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